

Lawrence Livermore National Laboratory Biosciences Overview



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Physical & Life Sciences (PLS) Directorate
Biosciences & Biotechnology Division (BBTD)

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LLNL-PRES-489691



Physical attributes of LLNL sites

Livermore Main Site—1.2 square miles

- Total gross square feet: approximately 7.4 million (677 facilities)
- Approximately 6,000 career employees
- Annual Federal Budget ~ \$1.5B



Experimental Test Site
(11 square miles)
near Tracy, California



Solving global security challenges for the Nation

Multidisciplinary Science, Technology and Engineering

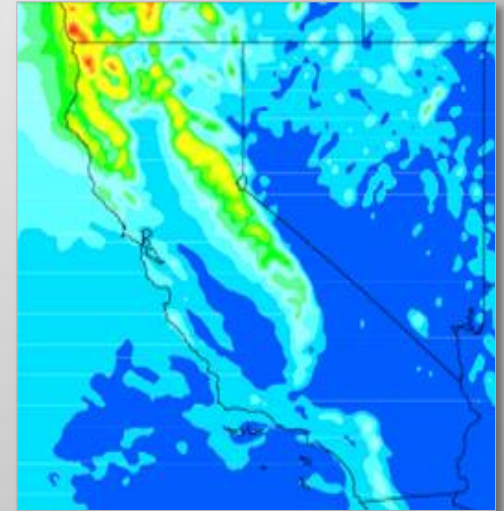
Nuclear Security



International and Domestic Security



Energy and Environmental Security

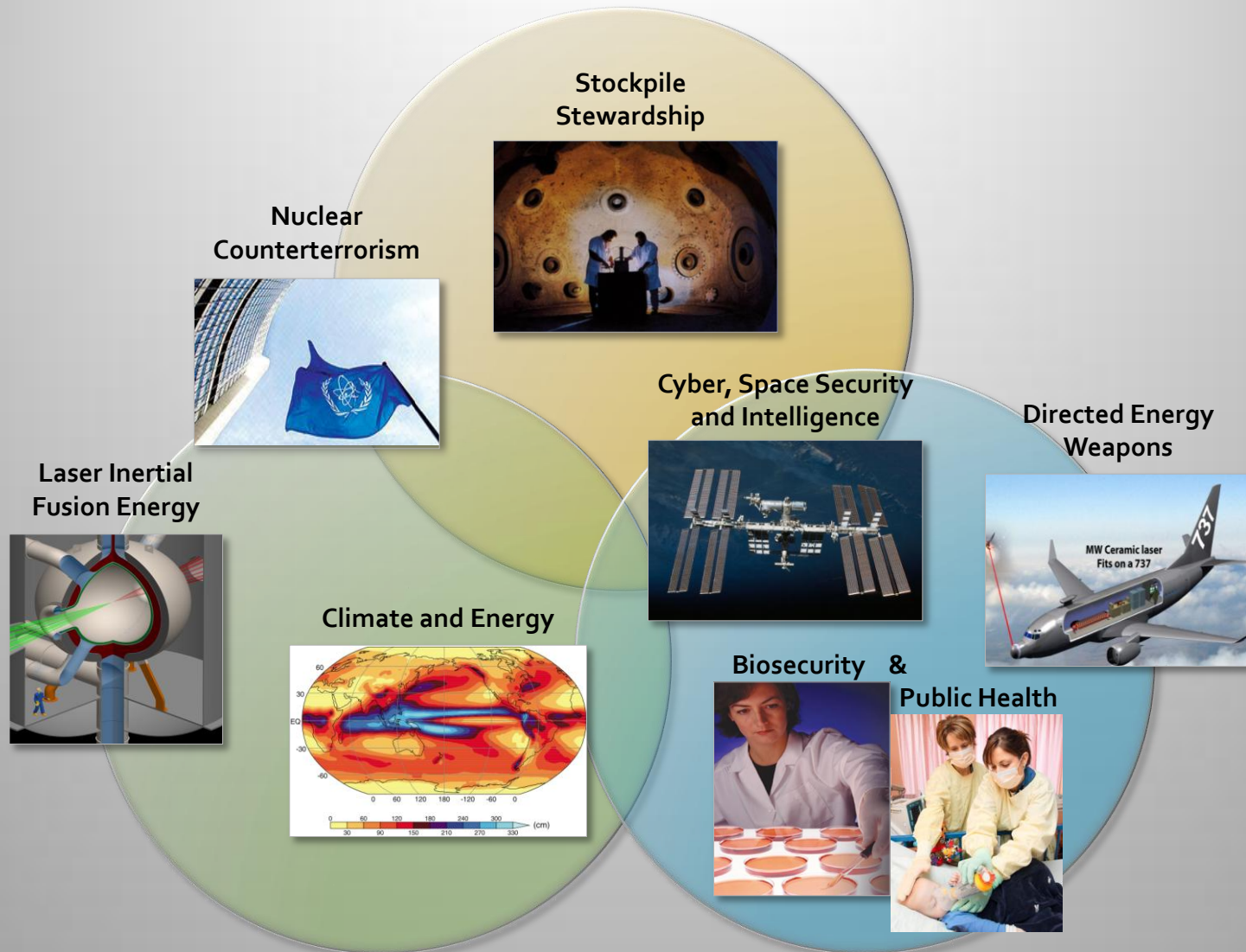


Basic Science



Engineering

LLNL Investment Priorities



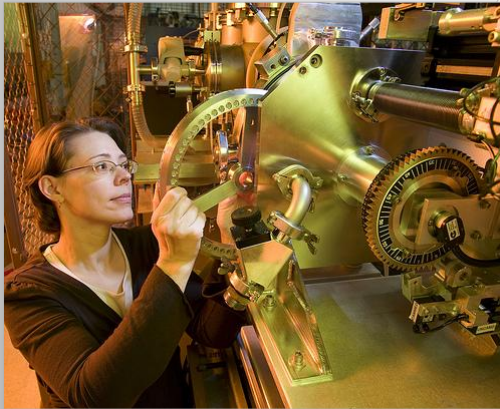
BBTD Summary

- **Multidisciplinary teams** including bioscientists, engineers, computational scientists, physicists, chemists
- **High-throughput analysis**—Joint Genome Institute
- **Computational biology**—Massively parallel computing resources and biocomputing expertise
- **Extremely sensitive biochemical measurements**—Accelerator Mass Spectrometry, single cell biochemistry
- **Research** on the health effects of pathogens, chemicals and radiation
- **Development** of technology for research and diagnostics
- **Establishment of collaborative partnerships** to develop technologies for the detection and characterization of cancer



LLNL Facilities & Capabilities

Center for Accelerator Mass Spectrometry



Forensic Science Center



BSL-3 Facility



National Ignition Facility



Site 300—Explosives Test Site



High Performance Computing and Simulation Facility

LLNL Facilities & Capabilities

BioAMS



Animal Facility



Joint Genome Institute

Livermore Microarray Center



Center for Micro- and Nanotechnology

Any Questions?